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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COOLEY, CHARLES E

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/873,209Applicant(s)
EngelExaminer
Charles CooleyArt Unit
1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-30 is/are pending in the application.
- 4a) Of the above, claim(s) 10, 20-22, and 28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11-19, and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-7 and 9-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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OFFICE ACTION

Election/Restriction

1. Applicant's election with traverse of Group I and Species A in Paper No. 9 is acknowledged. The traversal is primarily on the ground that there would not be a serious burden on the PTO.

This is not found persuasive because with regard to apparatus claims versus method claims, in apparatus claims the material or article worked upon does not limit apparatus claims and is not a major consideration when determining the patentability of said apparatus claims (MPEP 2115). "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). In stark contrast thereto, in method claims the materials on which a process is carried out must be accorded weight in determining the patentability of a process. *Ex parte Leonard*, 187 USPQ 122 (Bd. App. 1974) and see MPEP 2116. Accordingly, unlike the elected apparatus claims, patentable weight must be given to the claimed material set forth in the pending nonelected method claims (see claim 21, line 4) which

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significantly alters the search strategy and amplifies the searching required which leads to a burden on the PTO.

Applicant reaches the premature conclusion that a serious burden does not exist but provides no showing or evidenced to support such a conclusion. Clearly, consideration of additional claims drawn to multiple species and distinct groups of inventions mandate divergent search fields (and the concomitant hundreds to thousands of patents) and time consuming consideration of those patents which gives rise to a substantial burden on the PTO. Applicant has not established that the inventions of Group I and Group II are not distinct, so the restriction requirement is believed to be proper. Applicant has not traversed the species requirement on the grounds that the species are not patentably distinct, hence it is not seen how the species requirement is in error.

Nonetheless, Applicant apparently feels the requirements of Paper No. 8 are an injustice. If this feeling lingers, the examiner would be remiss in not urging Applicant to petition for relief pursuant to 37 CFR 1.44 since the requirement is still deemed proper and is therefore made FINAL.

2. Claims 10, 20-22, and 28-30 are thereby withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

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3. This application contains claims 10, 20-22, and 28-30 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to this final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Specification

4. The abstract and title are acceptable.

Claim Rejections - 35 U.S.C. § 112, second paragraph

5. Claims 1-7, 9, 11-19, and 23-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second paragraph of 35 U.S.C. § 112 requires a claim to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Under *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970) and *In re Moore*, 169 USPQ 236 (CCPA 1971), claims must be analyzed to determine their metes and bounds so that it is clear from the claim language what subject matter the claims encompass. This analysis must be performed in light of the applicable prior art and the disclosure. The definiteness of the claims is important to allow others who wish to enter

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the market place to ascertain the boundaries of protection that are provided by the claims. *Ex parte Kristensen*, 10 USPQ 2d 1701, 1703 (BPAI 1989).

One of the purposes of 35 U.S.C. § 112, second paragraph, "is to provide those who would endeavor, in future enterprise, to approach the area circumscribed by the claims of a patent, with adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance." *In re Hammack*, supra. As set forth in *Amgen Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1217, 18 USPQ2d 1016, 1030 (Fed. Cir. 1991):

The statute requires that "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." A decision as to whether a claim is invalid under this provision requires a determination whether those skilled in the art would understand what is claimed. See *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985) (claims must "reasonably apprise those skilled in the art" as to their scope and be "as precise as the subject matter permits.").

The pending claims fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention and are therefore of indeterminate scope for the following reasons:

With regard to the arguments on the combination/subcombination issue filed 27 NOV 2002, Applicant states the rejection "is not well understood". Put simply, Applicant is required to state on the record what the scope of claims 1-7, 9, 11-19, and 23-27

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purports to be. Are these claims drawn to subcombination of the assembly only (which appears to be Applicant's intention) or the combination of the assembly with the elements of the mixer such as the mixer shaft and vessel?

For example, claim 1 recites "a support mounted around the opening" and "a sealing assembly mounted at an axial location relative to the mixer shaft, the sealing assembly having a rotating seal element that surrounds the mixer shaft" while claim 3 relates the orientation of the bearings to the mixer shaft. This exemplary language suggests that the elements of the mixer (such as the vessel with its opening and the mixer shaft) are being claimed in positive cooperation with the assembly. Since Applicant's intent appears to be the claiming of the assembly subcombination only, said language should be revised in a functional format such as --a support adapted to be mounted around the opening-- or --a support mountable around the opening-- and --a sealing assembly adapted to be mounted at an axial location relative to the mixer shaft, the sealing assembly having a rotating seal element that is adapted to surround the mixer shaft-- or --a sealing assembly mountable at an axial location relative to the mixer shaft, the sealing assembly having a rotating seal element that is adapted to surround the mixer shaft-- or the like. This format clearly indicates that the subcombination of the assembly is being claimed and the elements of the mixer are merely the environment for which the assembly is intended.

For purposes of applying the prior art and clarifying the record for a potential appeal, the pending elected claims are deemed drawn to the subcombination of the

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assembly only. Accordingly, all elements of the mixer such as the vessel and its opening and the mixer shaft cannot be afforded patentable weight.

Amended claims 6 and 7 appear to contradict each other and the disclosure as the base is associated with the sealing assembly rather than the bearings (see Fig. 1 and claim 7). Compare with claims 16 and 17 which are proper.

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Amended claims 1, 6, 7, 11, 16, 17, 18, 23 and 24 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rubin (cited in Paper No. 5 as US 3,606,260).

The patent to Rubin discloses in Fig. 2 an assembly 25 in cartridge form (col 6, lines 61-63) including a support or supporting means 26; a sealing assembly or sealing means (Fig. 2) or 150 (see the alternate embodiment 150 of the seal in Fig. 4) mounted at an axial location relative to a shaft 23; the sealing assembly of Fig.2 or Fig. 4 having a rotating seal element or means 65, 71 that surrounds the shaft 23 and is positioned between a first stationary sealing ring or means 64 and a second stationary sealing ring

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or means 70; a first bearing or first bearing means 75 mounted to the support 26 that surrounds and supports the shaft 23 at a first axial location thereof; a second bearing or second bearing means 78 mounted to the support 26 that surrounds and supports the shaft 23 at a second axial location thereof; the support 26 including a first support portion 26b that supports the sealing assembly and a second support portion 26a that supports the first and second bearings 75, 78; the first support portion 26b comprising a base 26b attachable to the vessel wall 42; the second support portion 26a comprises a housing 26a attached to the base 26b which housing 26b supports the first and second bearings (Fig. 2); the first stationary sealing ring 64 contacting the rotating seal element 65, 71 at 65a; the second stationary sealing ring 70 contacting the rotating seal element 65, 71 at 70a; the seal element 65, 71 adapted for use with lubricating material (col. 9, lines 39-69).

Claim Rejections - 35 U.S.C. § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 9 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubin (US 3,606,260) in view of Blakley et al. (US 5,568,975).

Rubin (US 3,606,260) does not disclose the inner bearing housing. Blakley et al. (USP 5,568,975) discloses a shaft 12; axially extending bearing 20 and an inner bearing housing 14 that surrounds a portion of the shaft 12 and is mounted to the bearing 20. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the assembly of Rubin with an inner bearing housing as disclosed by Blakley et al. for the purpose of providing the shaft with a wear sleeve to protect the shaft (Col. 4, lines 8-22).

10. Claims 2-5, 12-15, and 25-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubin (US 3,606,260) in view of Armitage (US 2,332,684).

Rubin (US 3,606,260) discloses that the assembly and thus the elements thereof (such as the sealing assembly and bearings) are removable (col. 9, line 70 through col. 10, line 46) but does not disclose the bearings in the form of the recited tapered roller bearings. The patent to Armitage discloses an assembly for supporting a shaft 10 which employs axially spaced tapered rollers bearings 16 and 23 in the recited configuration as seen in Fig. 1. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the bearings of Rubin with tapered rollers bearings as disclosed by Armitage for the purpose of supporting the shaft in a rigid fashion and to resist both axial and radial loads (page 2, col. 1, lines 22-25).

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11. Claims 2-5, 12-15, and 25-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubin (US 3,606,260) in view of Kapaan et al. (US 5,667,313).

Rubin (US 3,606,260) discloses that the assembly and thus the elements thereof (such as the sealing assembly and bearings) are removable (col. 9, line 70 through col. 10, line 46) but does not disclose the bearings in the form of the recited tapered roller bearings. The patent to Kapaan et al. discloses an assembly for supporting a shaft 18 which employs axially spaced tapered rollers bearings 2 in the recited configuration as seen in Fig. 1. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the bearings of Rubin with tapered rollers bearings as disclosed by Kapaan et al. for the purpose of enabling such coaxial bearings to be placed under a certain initial load (col. 1, lines 5-8).

12. Claims 2-5, 12-15, and 25-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubin (US 3,606,260) in view of Gradu (US 6,293,704).

Rubin (US 3,606,260) discloses that the assembly and thus the elements thereof (such as the sealing assembly and bearings) are removable (col. 9, line 70 through col. 10, line 46) but does not disclose the bearings in the form of the recited tapered roller bearings. The patent to Gradu discloses an assembly for supporting a shaft S which employs axially spaced tapered rollers bearings 36 in the recited configuration as seen in Fig. 1. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the bearings of Rubin with tapered

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rollers bearings as disclosed by Gradu for the purpose of enabling the preload of the bearings to eliminate radial and axial play in the bearings (col. 1, lines 42-45).

13. Claims 2-5, 12-15, and 25-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubin (US 3,606,260) in view of Rode (US 6,327,773).

Rubin (US 3,606,260) discloses that the assembly and thus the elements thereof (such as the sealing assembly and bearings) are removable (col. 9, line 70 through col. 10, line 46) but does not disclose the bearings in the form of the recited tapered roller bearings. The patent to Rode discloses an assembly for supporting a shaft 106 which employs axially spaced tapered rollers bearings 116, 126 in the recited configuration as seen in Fig. 1. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the bearings of Rubin with tapered rollers bearings as disclosed by Rode for the purpose of providing axial and radial support within the bearing assembly (col. 9, lines 1-3).

14. Claims 2-5, 12-15, and 25-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubin (US 3,606,260) in view of Casey (US 5,876,127).

Rubin (US 3,606,260) discloses that the assembly and thus the elements thereof (such as the sealing assembly and bearings) are removable (col. 9, line 70 through col. 10, line 46) but does not disclose the bearings in the form of the recited tapered roller bearings. The patent to Casey discloses an assembly for supporting a shaft 10 which employs axially spaced bearings 32 in the recited configuration as seen in Fig. 1. The bearings 32 may be ball bearings or rollers. Since Casey suggests the equivalence of

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ball bearings and roller bearings, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the ball bearings of Rubin with tapered rollers bearings as disclosed by Casey or since the use of a tapered bearing assembly is advantageous for applications requiring the use of shafts made of hardened material or for application where the direction of shaft rotation is expected to reverse (col. 2, lines 4-7 and col. 3, lines 31-35).

Response to Amendment

15. Applicant's arguments with respect to the pending claims have been considered but are deemed to be moot in view of the new grounds of rejection necessitated by the amendments to claims.

Applicant is reminded that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

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Turning to the rejection of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) and limitations from a pending application's specification will not be read into the claims (*Sjolund v. Musland*, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)). Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. *Verdegaal Brothers Inc. v. Union Oil Co. of California*, supra. A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (*In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789

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(Fed. Cir. 1983), *cert. denied*, 465 U.S. 1026 (1984) (and overruled in part on another issue), *SRI Intel v. Matsushita Elec. Corp. Of Am.*, 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), *cert. denied*, 116 S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the reference to Rubin discloses each and every element set forth in the claims and how the pending claims read on the disclosure of the reference, hence the rejection is considered proper.

16. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM

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THE DATE OF THIS FINAL ACTION. ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Charles Cooley whose telephone number is ☎ (703) 308-0112.

18. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is ☎ (703) 308-0651.

Dated: 14 May 2003

A handwritten signature in black ink, appearing to read "Charles Cooley", with a horizontal line underneath it.

**Charles Cooley
Primary Examiner
Art Unit 1723**